BEFORE THE SOUTH CAROLINA PUBLIC SERVICE COMMISSION

DOCKET NO. 2020-125-E

In the Matter of:	)	
	)	**SURREBUTTAL TESTIMONY**
Application of Dominion Energy for	)	**KEVIN W. O'DONNELL, CFA**
South Carolina for Adjustment of Rates and	)	
Charges Applicable to Electric Service in	)	
South Carolina	)	

ON BEHALF OF THE

SOUTH CAROLINA ENERGY USERS COMMITTEE

December 17, 2020

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I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS FOR THE RECORD.

A. My name is Kevin W. O'Donnell. I am President of Nova Energy Consultants, Inc. My business address is 1350 SE Maynard Rd., Suite 101, Cary, North Carolina 27511.

Q. ON WHOSE BEHALF ARE YOU PRESENTING TESTIMONY IN THIS PROCEEDING?

A. I am testifying on behalf of the South Carolina Energy Users Committee ("SCEUC"). A number of SCEUC members take retail electric service from the applicant, Dominion Energy South Carolina ("DESC" or "the Company"), and the outcome of this proceeding will have a direct bearing on these SCEUC members.

Q. DID YOU PREVIOUSLY FILE DIRECT TESTIMONY IN THIS PROCEEDING ON NOVEMBER 10, 2020?

A. Yes, I did.

II. PURPOSE OF REBUTTAL TESTIMONY

Q. PLEASE DESCRIBE THE SCOPE OF YOUR REBUTTAL TESTIMONY IN THIS PROCEEDING?

A. The purpose in this rebuttal testimony is to address concerns raised by other intervenors in this case as well as provide additional statements on issues I previously raised in my direct testimony, for which I have now have more information.

Q. WHAT ISSUES DID OTHER INTERVENORS RAISE IN THIS CASE WITH WHICH YOU TAKE ISSUE?

A. Dr. Dismukes submitted testimony on behalf of the South Carolina Department of Consumer Affairs ("DCA") in which he recommended a cost of service based on the Peak & Average allocation methodology. Such an allocation methodology for generation plant investment has not previously been used by this Commission in setting rates and that, if adopted now, it would result in a tremendous imbalance in cost allocations between the various DESC customer classes. In fact, Dr. Dismukes' own testimony shows that if his recommended Peak and Average ("P&A") Cost of Service Study ("COSS") is adopted by this Commission and implemented entirely in this rate case, rates for industrial consumers would increase 22% and rates for large commercial consumers would increase by 11%.[1] Such excessive rate hikes would be quite damaging to the economy of South Carolina and ultimately raise rates significantly for residential consumers.

Q. WHAT INFORMATION DID YOU RAISE IN YOUR DIRECT TESTIMONY FOR WHICH YOU NOW HAVE ADDITIONAL EVIDENCE AND ASSOCIATED COMMENTS?

A. DESC included transmission and distribution investments within their Grid Investment Plan ("GIP") that they claimed provided economic benefit to customers. In my direct testimony, I expressed concern that the claimed economic benefit to customers of these investments were questionable. On the day that SCEUC filed my direct testimony in this proceeding, DESC submitted its responses to SCEUC's interrogatories that went into detail regarding these GIP investments. As such, I will address these responses in this rebuttal testimony.

[1] Dr. Dismukes is recommending a 9.51% rate increase for medium and large general service customers as found on p. 42, l. 12-14 of his direct testimony,

III. SUMMARY/RECOMMENDATIONS

Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS IN THIS CASE.

A. My findings are as follows:

- The Commission should reject the recommendation of Dr. Dismukes for allocating generation costs because the proposal violates cost causation rules as found in the open competitive markets and would cause a significant imbalance in customer class rates thereby harming South Carolina's economy; and
- The Commission should accept the Company's request for $17 million of cyber security assets, but it should reject without prejudice the remaining balance of $51 million of Grid Investment Plan (GIP) investments pending DESC's submission of a cost benefit analysis ("CBA") that proves its self-optimization grid assets provide benefits to SC consumers greater than the associated costs.

IV. GENERATION COST ALLOCATION

Q. WHY DO YOU OPPOSE THE GENERATION COST ALLOCATION METHODOLOGY PROPOSED BY CONSUMER ADVOCATE WITNESS DR. DISMUKES?

A. The generation plant allocation recommended by Dr. Dismukes does not follow basic regulatory principles rules of cost causation nor does it mimic cost causation in open competitive power markets. If Dr. Dismukes' P&A COSS methodology is implemented by this Commission, an economic imbalance will be created amongst the DESC rate classes that will do great harm to the South Carolina economy and, ultimately, permanently raise rates for the customer class for which Dr. Dismukes is advocating.

Dismukes' testimony shows that, if his recommendation is fully implemented, large commercial and industrial rates will increase rates 22%.[2] Dr. Dismukes' testimony is conflicting on this point for reasons he fails to explain. Dr. Dismukes is, in this case, recommending rate increases of 9.45% for commercial and industrial consumers. However, make no mistake, Dr. Dismukes recommendation in this case represents the proverbial "camel's nose under the tent" whereby large commercial and industrial rates will inexorably increase 22%. Such massive rate hikes would work tremendous hardship on manufacturers and commercial customers, and all of their employees. A massive rate hike of 22% would force industrial customers to move production from South Carolina, thereby raising rates for remaining customers.

Q. HOW HAS DESC AND THIS COMMISSION ALLOCATED GENERATION AND TRANSMISSION COSTS IN PAST PROCEEDINGS?

A. Since 1982, DESC has utilized, and this Commission has accepted, a coincident peak ("CP") cost allocation method in its allocation of production and transmission plant investments.[3] In its use of the CP cost allocation method, the Company derives its system peak demand based on the average demand between 2 pm and 6 pm on the peak demand day.[4] In regard to its allocation of distribution plant investments, the Company historically has based its cost allocation upon relative class non-coincident peaks ("NCP").[5]

Q. HOW DID DESC ALLOCATE GENERATION AND TRANSMISSION COSTS AMONGST ITS CUSTOMER CLASSES IN THIS CASE?

A. DESC followed Commission precedent from past cases and allocated generation and transmission plant investment by the CP methodology.[6]

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[2] Direct Testimony of Witness Dismuke, Exhibit DED-9, p. 2

[3] Witness Kochems Direct Testimony, page 17: lines 21.
[4] Witness Kochems Direct Testimony, page 17: lines 13 – 15.
[5] Witness Kochems Direct Testimony, page 17: lines 9 – 10.
[6] Company Witness Kochems Direct Testimony, p. 18, l. 4-7.

Q. WHAT GENERATION ALLOCATION METHODOLOGY DID THE OFFICE OF REGULATORY STAFF ("ORS") RECOMMEND IN THIS CASE?

A. ORS Witness Michael Seaman-Huynh recommended the Commission allocate generation investment using the same CP methodology as proposed by DESC in this case.[7]

Q. WHAT GENERATION ALLOCATION METHODOLOGY DID YOU RECOMMEND IN YOUR DIRECT TESTIMONY?

A. I recommend the continued use of the CP allocation methodology for generation and transmission plant investment.

Q. WHAT GENERATION ALLOCATION METHODOLOGY DID CONSUMER ADVOCATE WITNESS DISMUKES RECOMMEND IN THIS CASE?

A. Dr. Dismukes recommended the Peak and Average ("P&A") allocation method in place of the Company's current CP cost allocation method for production plant cost.[8] Additionally, Dr. Dismukes recommended the Company be required to gather monthly system coincident peak information on a class basis in the future and to also file an alternative Cost of Service Study ("COSS") for its transmission plant cost on the basis of a 12-CP basis in its next rate filing.[9]

Q. HOW DOES DR. DISMUKES' RECOMMENDED METHODOLOGY DIFFER FROM THAT OF THE METHODOLOGY RECOMMENDED BY THE COMPANY, THE ORS, AND YOU?

[7] Direct Testimony of ORS Witness Michael L. Seaman-Huynh, p. 5, l. 7-8.
[8] Witness Dismukes Direct Testimony, page 24: lines 12 – 13.
[9] Witness Dismukes Direct Testimony, page 27: lines 7 – 10.

A. As noted above, DESC has historically utilized a coincident peak ("CP") cost allocation method in its allocation of production and transmission plant investments. The CP cost allocation method is based upon a utility's single year 4-hour coincident peak, which represents the demand across DESC's plant facility during the time when overall electricity demand on the entire system is the highest in a given calendar year. In the current case, the Company derives its system peak demand based on the average demand between 2 pm and 6 pm on the peak demand day, which was July 18, 2019 for DESC's test year.[10]

On the production side, Dr. Dismukes is recommending that the Commission require DESC to utilize a P&A cost allocation methodology. This methodology utilizes a weighted average that is based on two factors: (1) an average energy weighting derived from the system's overall load factor, and (2) a peak demand weighting derived from the inverse of the system load factor. Dr. Dismukes contends that:

> …a significant portion of the Company's production plant fleet is devoted to serving energy needs of the company, and not solely demand needs. Therefore, the Company's current classification approach is inconsistent with the operations of its generation fleet.[11]

Dr. Dismukes testified that under the Company's current cost allocation methodology:

> …that residential, small commercial, and lighting service customers are currently paying above cost of service rates and subsidizing medium and large commercial service customer rates.[12]

Additionally, on the transmission side, Dr. Dismukes recommended that the Commission require DESC to compile and measure monthly system coincident

[10] Witness Kochems Direct Testimony, page 18: lines 2.
[11] Witness Dismukes Direct Testimony, page 24: lines 22 through p. 25, l. 2.
[12] Witness Dismukes Direct Testimony, page 24: line 23, and page 25: lines 1 – 2.

peak information on a class basis going forward and then to use this information to include an alternative Cost of Service Study (COSS) in any future filings based upon a 12-CP basis.

Q. IS THE COSS METHODOLOGY RECOMMENDED BY DR. DISMUKES APPROPRIATE FOR USE IN SETTING RATES?

A. No, I do not. The P&A methodology recommended by Dr. Dismukes utilizes an equal allocation of energy to meeting the peak demand of the utility. Such an assumption is not logical and does not reflect the reality of how prices are determined in open markets. The DESC electric system was designed to meet a single annual peak and, therefore, the allocation of production costs should be based upon the CP allocation method.

Q. FROM AN ANALYTICAL PERSPECTIVE, PLEASE EXPLAIN HOW DR. DISMUKES' P&A METHODOLOGY CHANGES THE BALANCE THAT HAS EXISTED BETWEEN SOUTH CAROLINA CUSTOMER CLASSES OVER THE YEARS.

A. Dr. Dismukes' P&A model allocates fixed plant investment by the following formula:

> Peak and Average Allocation % = 50% of the customer class demand peak allocation ratio at the time of the system peak + 50% of the ratio of class energy consumption relative to the system energy consumption throughout the year.

The CP allocation is represented by the following formula:

> Coincident Peak Allocation % = 100% of the customer class demand allocation at the time of the system peak

The impact of this change can best be seen in the following example. Assume that the industrial customer class represents 25% of the total DESC capacity peak demand and that, on an energy basis, industrial consumers represent 50% of the

energy consumption on the DESC system in a given year. Under the P&A methodology advocated for by Dr. Dismukes, the allocation methodology would be calculated as follows:

P&A Allocation Calculation
Allocation = (0.5*25%) + (0.5*50%)
Allocation = 37.5%

Hence, 37.5% of all the capacity (*i.e.*, generation plant investment) would be allocated to the industrial consumer under Dr. Dismukes' methodology.

On the other hand, the Peak Allocation, which has been used in South Carolina for the past 38 years, would be calculated as follows:

Peak Allocation Calculation
Allocation = (1.0*25%)
Allocation = 25%

Now, assume the net income for the industrial class was $20 million and the total net generation investment was $1.0 billion. The customer class rate of return ("ROR") for the P&A allocation for the industrial class would be as follows:

P&A Class Rate of Return Calculation
ROR = $20 million / (.375 * $1.0 billion)
ROR = $20 million / $375 million
ROR = 5.3%

The class ROR for the Peak allocation for the industrial class would be calculated as:

Peak Allocation ROR Calculation
ROR = $20 million / (.25 * $1.0 billion)
ROR = $20 million/$250 million
ROR = 8.0%

So, from the above, it is clear that the change from the Coincident Peak Allocation methodology, which this Commission has used for 38 years, to the Peak and

Allocation methodology, would change the class rate of return from 8.0%, in which no rate hike may be needed, to 5.3%, where a significant rate hike may be warranted. **This change in customer class rate of return is what Dr. Dismukes is recommending in this case**. It is a dramatic change from past Commission precedence and will cause a tremendous imbalance in the customer class rate structures on the DESC system and, eventually, an increase in residential rates that will be permanent and much more than what DESC is requesting in this rate case.

Q. IS DOMINION THE ONLY REGULATED UTILITY IN SOUTH CAROLINA TO USE THE CP?

A. No. As recently as in 2019, the Commission authorized Duke Energy Carolinas, LLC ("DEC") and Duke Energy Progress, LLC ("DEP") to set rates based on the Peak Methodologies as recommended by their witnesses.[13]

Q. DOES DESC OFFER RATES OR RIDERS THAT ARE SPECIFICALLY DESIGNED TO CONTROL THE UTILITY'S PEAK DEMAND?

A. Yes, DESC offers a rider to Rates 23 (Industrial Power Service) and 24 (Large general Service Time-of-Use) that provide discounts of between $2.75 per kW to $4.50 per kw for industrial customers that can curtail (or be interrupted) their usage at times of peak in the summer months of June through September. The interruptible demand is defined as follows:

> Interruptible Demands (ID) shall be the positive difference between the KW of demand determined from the Company's metering facilities during each on-peak 15-minute interval in the current billing month less the Firm Demand Level (FDL). On-peak periods shall coincide with the exposure hours listed below.[14]

13 South Carolina PSC Order Nos. 2019-323 and 2019-341

[14] https://cdn-dominionenergy-prd-001.azureedge.net/-/media/pdfs/south-carolina/rates-and-tariffs/rider23.pdf?la=en&rev=12350c1a4c1641e58fb00684de90b585&hash=7CBDFDFB478F6C66

Q. DOES DR. DISMUKES' RECOMMENDATION IN THIS CASE REPRESENT HOW CAPACITY IS PRICED IN THE COMPETITIVE OPEN MARKETS?

A. No, it does not. Regulation should mimic open markets.

The P&A methodology assumes that consumers purchasing power supplies in the open market pay equal weight for the cost of energy and the cost of meeting the peak demand in a given year. If this assumption were true, wholesale prices in a competitive market would be based on some hybrid of the P&A model. I have completed approximately 30 wholesale power projects in my career, and I can categorically say that such a pricing scenario is simply an academic assumption that is not based on reality.

Capacity prices in open wholesale market are based on the price to meet peak demands and not to meet some hypothetical 50/50 mix of capacity and energy prices. Energy prices in the wholesale market represent fuel and variable O&M prices and do not represent long-term capacity prices.

The method that most accurately mimics the actual market realities is the CP methodology, where the generation assets are allocated based entirely on the ratio of the customer class demand at the time of the annual peak.

Q. DOES ANY OTHER WITNESS IN THIS CASE RECOGNIZE THE LINK BETWEEN REGULATION AND COMPETITIVE POWER MARKETS?

A. Yes. Along with Dr. Dismukes, the DCA also retained the services of Mr. Scott Hempling as its policy witness. Mr. Hempling testifies:

> Effective regulation replicates the pressures of competition.[15] …

[15] Id, p. 12, l. 12

> Prudence review is regulation's substitute for competition's consequences.[16]

Mr. Hempling sums up his position by stating:

> Regulation cannot produce results equivalent to competition, of course. Regulated utilities have an obligation to serve all paying customers. This obligation to serve includes an obligation to plan to serve, and to be ready to serve, all customers in all foreseeable circumstances. Companies in competitive markets, in contrast, have only the obligations they accept contractually (along with any imposed by statute or rule). Because these differences in obligation produce differences in cost, regulation cannot produce results equivalent to competition. **But regulation should create pressures comparable to competition**—so that the utility achieves, and its customers experience, performance as 1 comparable to competition as possible.[17] (underline and bold added)

Mr. Hempling recognizes, as I have testified, that regulation should create pressures comparable to competition. Wholesale competitive markets price capacity on the contribution of each customer to the total system peak demand. As such, in order to mimic competitive markets, generation capacity should be priced on demand and not, as Dr. Dismukes advocates, a mix of demand and energy.

Q. WHICH OF THESE TWO METHODS DO YOU BELIEVE ACCURATELY REFLECTS THE MANNER IN WHICH DESC BUILT ITS GENERATION FLEET?

A. DESC built its generation fleet to meet peak demand. As a result, I believe the proper allocation methodology to use in this case is the CP methodology.

Because regulation should reflect the reality of competitive markets, fixed costs such as generation should be allocated on peak and not any mix of demand (capacity) and energy.

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16 Id, p. 13, l. 8

17 Id, p. 13, l. 14 to p. 14, l. 2

Q. WHAT ARE THE LONG-TERM IMPLICATIONS OF DR. DISMUKES' ARGUMENT AGAINST THE USE OF THE CP COST ALLOCATION METHODOLOGY?

A. Dr. Dismukes' argument against the CP cost allocation method currently being used by the Company is largely based on his contention that the rates for residential, small commercial, and lighting service customers are subsidizing the medium and large commercial customers.[18] What Dr. Dismukes did not analyze, however, is the impact that raising industrial rates by 22% and commercial rates by 11% would have on the South Carolina economy and, ultimately, the rate impact experienced by residential consumers when manufacturing leaves the state for lower cost power supplies.

In my direct testimony, I presented evidence to show that residential and industrial rates for DESC are the highest in the Southeast and are impairing economic development in South Carolina. One cannot look at one recommendation without looking at how the implementation of that recommendation would have unanticipated consequences.

Q. WHAT ARE THE IMPACTS TO THE RATES ON A RATE CLASS BASIS AS PRESENTED BY DR. DISMUKES' RECOMMENDATIONS?

A. As referenced above, Dr. Dismukes is proposing a P&A allocation methodology for generation plant investment. Within **Table 1** below, I have developed a comparison between the associated revenue rate increases under each of the following four scenarios:

- DESC's Current CP Allocation Methodology Using DESC's Proposed Rates in this case;
- DESC's Current CP Allocation Methodology Using Mr. Seaman-Huynh ORS'

[18] Prefiled Direct Testimony of Dismukes, p. 24, l. 22 – p. 25, l. 2.

Proposed Rates in this case;

- Dr. Dismukes' DCA Recommended P&A Allocation Methodology Using DCA's Proposed Rates in this case; and
- Dr. Dismukes' Ultimate Rate Increase Proposal using his P&A COSS Recommendation and assuming an equalized 8.48% customer class rate of return.

Table 1: Rate Revenue Percentage Increases Under P&A and Peak Methodology

	Reference	Residential	Small Commercial	Medium Commercial	Large Commercial / Industrial	Street Lighting
Rate Revenue Percentage Increase Under DESC's Current CP Allocation Methodology and Proposed Rates	**Exhibit KRK-2**	8.24%	8.31%	8.79%	8.75%	3.13%
Rate Revenue Percentage Increase Under CP Allocation Methodology and ORS' Proposed Rates	**Exhibit MSH-1**	0.01%	(1.07%)	(0.05%)	0.67%	0.70%
Rate Revenue Percentage Increase Under DCA's Proposed P&A Allocation Methodology [19]	**Table 1 of prefiled Dismukes Testimony, p.33**	7.74%	7.74%	9.53%	9.53%	7.74%
Rate Revenue Percentage Increase Under DCA's Proposed P&A Allocation Methodology and Equalized Rate of Return	**Exhibit DED-9**	5.77%	0.45%	11.51%	22.02%	8.10%

The rows in **Table 1** above exhibit the respective rate increase percentages for each scenario should changes be made to what is currently in place under the Company's CP Allocation Methodology and Dr. Dismukes' P&A allocation methodology. If one simply examines this table and compares the Company's CP Cost Allocation

[19] Note that the percentages within the "Rate Revenue Percentage Increase Under Dr. Dismukes P&A Allocation Methodology and Current Rates" line of **Table 1** above were calculated as the percentage change between the total rate revenue dollar values presented in **Exhibit KRK-1** and **Exhibit DED-9**.

Methodology to the Company's CP Cost Allocation Methodology Using Proposed Rates, these rate increases are relatively consistent across the board and range from 8.24% to 8.79% across the Company's various customer classes (excluding area lights at 3.13%).

However, if one compares the Company's CP Cost Allocation Methodology to Dr. Dismukes' P&A Cost Allocation Methodology, these rate increases range from 0.45% (small commercial) to 9.53% (large commercial/industrial). As referenced above, Dr. Dismukes feels as though the current CP cost allocation methodology used by the Company to allocate costs on a production and demand basis is leading to residential, small commercial, and lighting service customers paying above cost of service rates and essentially subsidizing medium and large commercial service customer rates. However, based on what Dr. Dismukes is recommending in this case, that pendulum would simply swing in the opposite direction and cause the rate increase for the Large Commercial / Industrial rate class to be the largest in this rate case. However, most importantly, if followed to its logical conclusion, Dr. Dismukes' recommendation would result in a stunning 22% rate increase to industrial consumers and an 11.5% increase for commercial consumers.

Even more importantly is the fact that Dr. Dismukes did not analyze the impact that a 22.02% rate hike would have on the economy of South Carolina if his recommendation were accepted and manufacturing rates were increased 22%. Specifically, Dr. Dismukes did not undertake an analysis to determine what would happen to residential rates if manufacturing in South Carolina would react to such a large electric rate hike by closing the plants in South Carolina and leaving all the fixed costs to be paid for the remaining residential customers. Such a scenario would result in residential rates skyrocketing on a permanent basis.

Q. WHAT WOULD BE THE IMPACT OF A 22% RATE HIKE TO INDUSTRIAL CONSUMERS IN SOUTH CAROLINA?

A. A 22% rate hike would be devastating to manufacturing in South Carolina. As I outlined in my direct testimony, DESC manufacturing rates are already the highest in the southeast. If the Commission were to follow Dr. Dismukes' P&A recommendation and ultimately raise rates 22.02% on industrial customers, it is likely that manufacturing in South Carolina would move to other lower-cost states.

Taken to the extreme, if South Carolina manufacturing were to leave the DESC system entirely, the fixed costs associated with service to these customers would need to be absorbed by all remaining customers. Under that scenario, remaining retail rates would increase by approximately 26.0% if industrial consumption ceased. This estimate of 26.0% increase to remaining consumers is conservative as there are many commercial establishments that serve as "feeder" facilities into large industrial plants and they, due to the cessation of business at the industrial plants, would also close, thereby increasing remaining customer rates even further than the estimated 26.0% increase.

As the old saying goes:

Be careful of what you ask for because you may actually get it.

Q. CAN YOU PROVIDE AN EXAMPLE SHOWING HOW HIGH ELECTRIC RATES CAN CAUSE A PLANT CLOSURE AND UNEMPLOYMENT TO INCREASE?

A. Yes. The Commission need to look no further than the Century Aluminum Plant in Goose Creek, South Carolina to see the impact of how high electric prices can cause a plant to close and workers to be laid off. This Commission, I am sure, is well aware of the years long battle by Century Aluminum to secure lower cost power. A recent ruling by a state judge indicated that Santee Cooper, Century's power supplier, has the exclusive right to supply power to the plant.[20] Century Aluminum

[20] https://abcnews4.com/news/local/century-aluminum-to-close-at-end-of-the-year-due-to-energy-costs

has sent notices to its employees indicating the plant could close by Dec. 31, 2020. If the plant does close, 300 South Carolinians will be out of work.[21]

Adoption of a rate design that would increase manufacturing rates by 22% and commercial rates by 11.5% would result in higher unemployment in South Carolina and economic misery for those laid off. Another saying that comes to mind is:

Those that do not learn from history are bound to repeat it.

V. DESC'S GRID INVESTMENT PLAN

Q. PLEASE PROVIDE AN EXPLANATION OF A GRID INVESTMENT PLAN AND HOW IT BENEFITS CONSUMERS.

A. Grid investment plans ("GIP") are technologically enhanced assets that are installed on transmission and distribution systems in the hope and expectation that they will lower customer outages. Fewer and shorter customer outages are, obviously, benefits to consumers, but these benefits come with a significant cost to the consumer. The basic question that comes with the implementation of these assets is:

> Are these investments made by the company and paid for consumers ultimately worth it?

The Company did not provide any evidence to show that, if adopted, its reliability indicators, System Average Interruption Duration Index (SAIDI) and System Average Frequency Index (SAIFI), would improve. Without such basic information, customers and this Commission cannot answer the basic question as stated above. Evidence of performance is needed to ensure ratepayers are treated fairly and equitably.

[21] Id

Q. IS DESC SEEKING COMMISSION APPROVAL OF ANY GIP ASSETS IN THIS CASE?

A. Yes. In my direct testimony, I expressed concern that Dominion's $2.1 billion upgrades in transmission and distribution assets may contain some GIP assets. On the day that SCEUC filed my direct testimony in the case (*i.e.*, November 10, 2020), we received a data request response from DESC that indicated it was seeking recovery of the following items, and associated costs, in plant and equipment in this case:

Table 2: DESC GIP Investments[22]

GIP Investment	Investment ($)
AMI	$ 18,726,577
Advanced Analytics	$ 198,650
Cyber Security	$ 16,965,231
Self-healing grid	$ 23,412,562
Enterprise Asset Management System	$ 2,962,419
Outage Mgmt. System	$ 5,530,604
Transportation Electrification	$ 134,340
Total	**$ 67,930,383**

All of these items were also investments that Dominion Energy Virginia ("DEV") cited as assets in its Grid Investment Plan for which it recently sought rate recovery in Virginia.[23]

Q. WERE YOU A WITNESS IN THE DEV GIP CASE IN VIRGINIA?

A. Yes, I was a witness for the Southern Environmental Law Center in DEV's last GIP case (*i.e.*, Case No. PUR-2019-00154).

[22] DESC Response to SCEUC Interrogatory 1-2.
[23] Virginia State Corporation Commission, Docket No. PUR-2019-001154, Direct Testimony of Kevin O'Donnell, Table 6, p. 23.

Q. HOW DOES DOMINION'S APPLICATION IN THIS DESC CASE DIFFER FROM ITS DEV APPLICATION IN VIRGINIA?

A. DEV was required to prove each GIP project was cost beneficial in Virginia. Specifically, DEV provided a Cost Benefit Analysis ("CBA") for each project. However, in its current application here in South Carolina, Dominion did not provide any CBA. When asked for justification of the assets, DESC responded with the stated purposes of the associated assets, but the Company did not provide any economic justification along the lines of a CBA.

Q. CAN YOU PROVIDE AN EXAMPLE OF THE RESPONSE DESC PROVIDED FOR ONE OF ITS PROPOSED GIP ASSETS?

A. Yes. In response to the SCEUC data request justifying its proposed Self-Healing Grid, Dominion responded with the following:

> **Reducing customer outage durations through automated switching.**[24]

DESC's response does not provide any economic justification to support its request that customers pay $68 million for grid investments, nor why DESC should be allowed a generous return on that same investment. Below I have included a list of questions that Dominion should be required to answer and address as part of their request to justify why consumers should pay for its $68 million investment:

1. How much outage time per customer will this investment save?
2. What is the cost of the investment on an annual basis to the typical residential, commercial, and industrial consumer?
3. Did Dominion consider the effect on customers with on-site generation that will be paying higher charges in their rates for GIP assets they do not need or want?
4. Will Dominion guarantee a set amount of reduction time in exchange for placing the assets into rate base?
5. Has Dominion performed any customer survey on how much customers are

[24]DESC Response to SCEUC Interrogatory 1-2 (SCEUC 1-2, 1-3 Transmission and Distribution.xlsx).

willing to pay for these grid investments?

Answers to the first two questions above can be determined through a CBA that should have been filed by DESC in the current proceeding.

Ultimately, the Commission should be given enough information to answer the ultimate question of whether the DESC projects will be economically viable for South Carolina consumers. Such information is not provided by DESC in this case.

In its 2018 grid modernization application in Virginia, the Virginia State Corporation Commission (SCC) noted the importance of having sufficient information from which to determine the economic justification of each grid modernization project. Specifically, the SCC stated the following in its final order in that case:

> In making these determinations, the Commission has followed all applicable statutory provisions. With regard to those elements that have not been approved, we agree with Consumer Counsel that as a general matter "the plan as filed is significantly lacking in detail with respect to the proposed investments."[9] Also with regard to the Plan in general, we agree with Environmental Respondents Witness Golin who stated, "As a complete package, the [grid transformation] Plan is not cost-effective and will result in an economic loss for all customers."[10] While we find the Plan elements related to Cyber and Physical Security are well-conceived, well-supported and cost-effective, we find that the remaining Plan elements, which will cost customers hundreds of millions of dollars, are not. We explain further below, based on the evidence in this record and taking each category seriatim.[25] (underline added)

Q. HAVE YOU BEEN INVOLVED IN ANY OTHER STATE IN THE SOUTHEAST WHERE GIP HAS BEEN AN ISSUE IN A RATE PROCEEDING?

[25] Virginia State Corporation Commission Docket No. 2018-00100, p. 6

A. Yes. Duke Energy made a very public push for grid modernization investments throughout its territories. I was involved in the general rate cases of Duke Energy Carolinas ("DEC") and Duke Energy Progress ("DEP") before the North Carolina Utilities Commission ("NCUC") in 2018 in which Duke introduced its "Power/Forward" plan to the North Carolina regulators. I am also currently involved in the DEC and DEP's ongoing 2020 rate cases, which are again being heard before the NCUC.

Q. DID DEC OR DEP SEEK RATE RECOVERY IN 2018 IN NORTH CAROLINA FOR ANY GRID MODERNIZATION INVESTMENTS?

A. No, the Company simply introduced its grid modernization efforts in the NC, but it did not seek rate recovery for those investments.

Q. HOW DID THE NCUC ADDRESS THE DEC AND DEP GRID MODERNIZATION PROPOSAL?

A. The Commission heard the concerns from intervenors regarding the cost of Duke's proposed grid modernization plans, otherwise known as "Power Forward". Specifically, the NCUC stated the following in the final order in the DEP case:

> The Commission notes that the Company is not seeking recovery of investments relating to Power/Forward in this rate case. Ultimately, the burden of proof is on the Company to support the prudence of investments in grid modernization if and when it seeks cost recovery of such investment. That burden of proof is not required in the current proceeding. Based on the full record in this docket, the Commission concludes, however, that the Company has not yet provided compelling evidence that the proposed grid investment plan will result in meaningful benefits to ratepayers despite its cost. The Commission acknowledges the potential rate impacts of implementing Power/Forward. CUCA witness O'Donnell testified that he calculated the impact on rates to range from an 8.94% increase for the Company's industrial customers to a 48.74% increase for the Company's residential customers. (Tr. Vol. 15, p. 131.) Existing dockets (such as Integrated Resource Planning and Smart Grid Technology Plans) as well as future general rate case proceedings provide opportunities for the Commission to consider

> evidence evaluating the prudency and reasonableness of Power/Forward costs.[26] (underline added)

As shown above, through this regulatory process, the NCUC expressed similar concerns regarding costs and economic feasibility as did the Virginia regulators. Grid modernization efforts must be shown to be reasonable and prudent investments that provide greater benefits than costs for the typical consumer.

DEC and DEP also filed rate cases in North Carolina 2019 and, July 2020, entered into a settlement agreement with the Public Staff of the NCUC to place several items of its Grid Improvement Plan (GIP) programs in a deferred account. The Public Staff stated that it reserves the right to review costs for reasonableness and prudence in a subsequent case. The settlement went on to state:

> E. DE Carolinas, in conjunction with the concurrent commitment of DE Progress, and the Public Staff will work together to develop biannual reporting requirements to track GIP expenditures that receive accounting deferral treatment. At a minimum, the reporting requirements will include (1) tracking of costs for each program, including the number of devices installed, types of projects completed, or circuits modified or impacted; (2) reporting on a circuit and substation level; (3) a summary of actual benefits compared to projected benefits, (4) operational system impacts of SOG and IVVC (i.e., number of SOG activations and failure rates, voltage and load reduction gained from IVVC), and (5) supporting data and analyses that informed significant changes to the original scope for the SOG and IVVC programs. The first of these reports shall be filed reflecting GIP expenditures eligible for deferral occurring in the last six months of 2020.
>
> F. The Company agrees to assess the cost effectiveness of GIP-related projects in an ongoing manner. <u>In addition, the Company agrees to undertake a cost benefit analysis for its automated lateral device program</u>. [27] (underline added)

[26] Final Order in NCUC Docket No. E-2, Sub 1142, p. 99-100 .

[27] NCUC Docket No. E-7, Sub 1214, E-7, Sub 1213, E-7, Sub 1187, Second Stipulation, July 31, 2020, p. 10-11

Based on the above stipulation language, it is clear that the regulators in North Carolina intend to assess the economics of the DEC and DEP grid modernization plans in future proceedings.

Q. HAS THE SOUTH CAROLINA PSC DEALT WITH THE ISSUE OF GRID MODERNIZATION COST RECOVERY?

A. No, not from a cost recovery standpoint. In 2019, DEC and DEP filed a rate case in South Carolina in which grid investment would have been an issue. However, DEC and DEP, both agreed with the Office of Regulatory Staff to establish a separate hearing docket to review the Duke GIP plan.[28] Any GIP-related costs have been placed in a deferred asset accounting pending DEC's and DEP's proposed recovery in its next rate case, which is expected to be in 2021.

On August 12, 2020, this Commission issued Order No. 2020-533 in which it established a non-docketed item ("NDI") that would provide an "*informational platform regarding or related to the Grid Improvement Plan*". To-date, there have not, to my knowledge, been any meetings on this issue.

Regardless of the progress made in this NDI item, South Carolina citizens deserve the same level of evidentiary support that is required in Virginia and North Carolina by its state regulators. Here, Dominion **chose** not to provide such support. Here, with one exception, the Commission should deny recovery of these costs.

Q. WHAT IS YOUR RECOMMENDATION TO THIS COMMISSION IN REGARD TO DOMINION'S PROPOSAL TO INCLUDE GRID IMPROVEMENT ASSETS INTO RATE BASE IN THIS PROCEEDING?

A. The assets noted in **Table 2** shown above are assets that DEV included in its Grid Investment Plan in Virginia. There is no difference in these assets between Virginia

[28] Order No. 2019-341, p. 11.

and South Carolina. As a result, with the exception of the proposed $16,965,231 of Cyber Security assets that must be installed to comply with standards from the North American Electric Reliability Corporation ("NERC"), I recommend the Commission deny the remaining balance of $50,965,152 of remaining assets without prejudice, pending the submittal of a detailed CBA showing the economic justification of those assets. Simply put, South Carolina consumers should be afforded every check and balance through this regulatory process in a similar manner to what occurred with Dominion in Virginia and nothing less.

VI. RECOMMENDATIONS

Q. PLEASE SUMMARIZE THE RESULTS OF YOUR FINDINGS AS PRESENTED IN THIS SURREBUTTAL TESTIMONY. MY RECOMMENDATIONS IN THIS CASE ARE AS FOLLOWS:

- Generation plant investment should be allocated by the CP method as recommended by DESC, ORS, and SCEUC in this case;
- The generation plant investment allocation as recommended by Dr. Dismukes would represent a permanent imbalance of rates in South Carolina that would permanently cause residential rates to skyrocket permanently and impair the economy of South Carolina;
- The T&D investments DESC is seeking to include in this case raise questions concerning the economic viability of the plant investments;
- South Carolina consumers deserve the same benefits of economic justification for the DESC proposed grid modernization assets that Virginia and North Carolina regulators require from justification of grid investment plans;
- I recommend the Commission accept the request of DESC for approximately $17 million of cyber security assets; and
- Lastly, I recommend the Commission reject $51 million of non-cyber security assets related to GIP assets without prejudice pending the Company

providing a complete cost/benefit analysis ("CBA") for each grid modernization asset it seeks to bring into rate base in South Carolina.

Q. DOES THIS CONCLUDE YOUR PREPARED SURREBUTTAL TESTIMONY?

A. Yes.